

# 07\_Reducing Infections and Building Immunity: Knowledge Encourages Prevention

Content Area: **Science**  
Course(s):  
Time Period: **Full Year**  
Length: **3-4 weeks**  
Status: **Published**

## **General Overview, Course Description or Course Philosophy**

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This course is a university level course which tests student's knowledge of the impact of lifestyle on one's overall health and well-being including on their physical, mental, and emotional status. It examines interventions to improve health in the areas of nutrition, physical fitness, stress management, disease prevention, and addiction use disorders . An examination by Rutgers University is required to obtain 3 college credits and an official transcript from the university.

## **OBJECTIVES, ESSENTIAL QUESTIONS, ENDURING UNDERSTANDINGS**

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- The prevention methods and issues related to the most common infectious and chronic diseases in the U.S.
- It is crucial to be proactive in one's own health care and itemize key factors to consider when making health care decisions.

## **CONTENT AREA STANDARDS**

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SCI.HS-LS1-2	Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
SCI.HS-LS1-3	Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.
VHEL.9-12.9.4.12.H.14	Listen to and speak with diverse individuals to enhance communication skills.

## **RELATED STANDARDS (Technology, 21st Century Life & Careers, ELA Companion Standards are Required)**

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12.9.3.HL.4	Evaluate the roles and responsibilities of individual members as part of the healthcare team and explain their role in promoting the delivery of quality health care.
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## **STUDENT LEARNING TARGETS**

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### **Declarative Knowledge**

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Students will understand:

- Pathogen, disease symptoms, infection pattern, treatment, and prevention methods for the most common infectious diseases
- Use of antibiotics with regard to bacterial infection and the implications of antibiotic-resistant strains of bacteria
- that antibodies battle infectious diseases
- that unwanted activities of the immune system cause allergies.
- information on organ transplants, blood transfusions, and the Rh factor

### **Procedural Knowledge**

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Students will be able to:

- Define the pathogen, disease symptoms, infection pattern, treatment, and prevention methods for the most common infectious diseases
- Discuss the use of antibiotics with regard to bacterial infection and the implications of antibiotic-resistant strains of bacteria
- Explain how antibodies battle infectious diseases
- Describe how unwanted activities of the immune system cause allergies.
- Discuss organ transplants, blood transfusions, and the Rh factor

## **EVIDENCE OF LEARNING**

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### **Formative Assessments**

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- chapter reviews
- group projects
- worksheets

## **Summative Assessments**

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- - Benchmarks – departmental benchmark given at the end of MP1, MP2, or MP3 & MP4 b(Semester Based Course)
  - Alternative Assessments
    - Lab inquiries and investigations
    - Lab Practicals
    - Exploratory activities based on phenomenon
    - Gallery walks of student work
    - Creative Extension Projects
    - Build a model of a proposed solution
    - Let students design their own flashcards to test each other
    - Keynote presentations made by students on a topic
    - Portfolio

## **RESOURCES (Instructional, Supplemental, Intervention Materials)**

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- Health and Wellness, 11th Edition

ISBN-13: 978-1449687106

ISBN-10: 1449687105

## **INTERDISCIPLINARY CONNECTIONS**

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Data analysis

Informal writing

Ethics

Computation

## **ACCOMMODATIONS & MODIFICATIONS FOR SUBGROUPS**

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See link to Accommodations & Modifications document in course folder.